

ABSTRACT OF THE DISCLOSURE

In a sample assembly for a thermoelectric analyzer, typically TSC (Thermally Stimulated Current) analyzer, a sample is fixed to an electrically-insulating substrate via an adhesive layer. The material of the adhesive layer is indium or gold-tin alloy. The indium has high thermal conductivity, resulting in good heat conduction between the sample and the substrate and therefore good temperature uniformity in the sample. Besides, the indium is soft metal, so that even when a stress occurs between the sample and the substrate because of the different rates of thermal expansion the indium can absorb the stress. The indium may be replaced by gold-tin alloy. The substrate has a pair of junction electrode layers formed thereon. The sample has a pair of electrode layers formed on the same plane of the sample. One of the electrode layers is connected with one of the junction electrode layers by electrically-conductive wire means, while the other of the electrode layers is connected with the other of the junction electrode layers by another electrically-conductive wire means. The substrate is made of preferably a highly electrically-insulating and highly thermally-conductive material which may be, for example, aluminum nitride (AlN), boron nitride (BN), beryllium oxide (BeO) or aluminum oxide (Al₂O₃). The sample may be preferably compound semiconductor such as GaAs.